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working through science, law and creative media to secure a future for all species, great or small, hovering on the brink of extinction

October 7, 2014

U.S. Environmental Protection Agency
EPA Docket Center, Mail Code 28221T
1200 Pennsylvania Ave, NW
Washington, DC 20460

Re: Underground Injection Control Program [79 Fed. Reg.46437, Aug. 8. 2014; EPA-HQ-OW-2014-0359-0001]

Dear Sir or Madam:

On behalf of the Center for Biological Diversity and its members, I am writing to urge the United States Environmental Protection Agency to urge the agency to strengthen its Underground Injection Control (UIC) program in ways that will allow the public and regulators to better understand the true extent of potential harm caused by dangerous injection wells operating throughout the country. Effective and robust data gathering is crucial to protecting public health and safety. Because states such as California have failed to meet their duty to protect public health and safety, the EPA must mandate stricter standards for data collection for injection wells.

I. California's state-run UIC program has been a failure.

In 2011, U.S. EPA issued a critique of California's Class II UIC program implementation. The EPA's study of the state's program showed serious shortcomings in numerous areas. The letter faults the Division of Oil, Gas, and Geothermal Resources (DOGGR) for, among other deficiencies:

- Failure to adequately protect groundwater resources containing less than 10,000 mg/L of total dissolved solids (TDS).
- Inadequate testing of Zones of Endangering Influence
- Arbitrarily limited scope of Areas of Review
- Inadequate testing for maximum surface pressure.
- Inadequate testing, inspection, and reporting
- Underqualified staff[1]

Despite receiving these harsh criticisms and a list of recommended actions from the U.S. EPA, DOGGR failed to take action to correct its UIC program. The results have been disastrous.

In July 2014, DOGGR ordered the shutdown of 12 Class II injection wells in Kern County due to concerns that these wells had been injecting waste into groundwater that was suitable for drinking or irrigation. DOGGR later added another 95 wells to the list of injection wells that may be injecting into water that are protected under the federal Safe Drinking Water Act due to their high purity. DOGGR was unable to answer the fundamental question of whether or not the waters being contaminated by waste disposal were protected waters.

[1] Letter from David Albright, U.S. EPA Region IX Manager, Groundwater Office, to Elena Miller, Supervisor, Division of Oil, Gas, and Geothermal Resources, July 18, 2011; *See also* Horsely Witten Group (Commissioned by U.S. EPA), "California Class II Underground Injection Control Program Review,", June 2011.

On July 17, 2014, the U.S. EPA's Regional Administrator, Jared Blumenfeld, sent a letter to John Laird, secretary of the California Natural Resources Agency, and Matt Rodriguez, secretary for environmental protection at the California Environmental Protection Agency, requesting a series of documents be produced to EPA over the course of several months.[2]

The documents that have been produced so far under this request have confirmed that California's water has not been protected. The State Water Resources Control Board confirmed that 9 wells in Kern County had contaminated aquifers that should have been protected under federal law.[3] In addition, the regional water board tested the water from 8 of the 108 water supply wells that are within one mile of the injection wells. Half of the samples found unsafe levels of arsenic, thallium, and nitrates.

Meanwhile, DOGGR has been unable to meet the EPA's deadline for submitting an "initial assessment" as to whether protected aquifers throughout the state have been contaminated. Its response to EPA was due September 16, but there is no indication that DOGGR has submitted an initial assessment to EPA.

A separate injection well, operated by Anterra in Ventura County, is currently under criminal investigation for possible water contamination violations.

EPA is obligated to step in where states have proven incapable of implementing their own UIC program: "The statutory responsibility to initiate federal enforcement actions may be delegated to a Region [of EPA] if a primacy state does not fulfill its responsibilities."[4] In California, where the UIC program implementation has failed to keep groundwater safe, EPA must take stronger action to correct DOGGR's failures.

II. California's reporting requirements are ineffective.

Despite having a permitting process and minimal reporting requirements for injection wells, these regulatory obligations have done little to protect the public from groundwater contamination. DOGGR still cannot state for certain whether any of over 100 different injection wells has been contaminated protected aquifers. Concurrently, well operators have shown that they cannot be relied upon to report instances of noncompliance within a timely manner.

Federal regulation 40 CFR 144.51(1), 144.28(b), and 146.94(b) require operators to report within 24 hours any noncompliance which may endanger health of the environment. EPA calls this provision "necessary to enable permitting authorities to take timely and appropriate steps to reduce or eliminate any potential threat to public health."[5] Yet as demonstrated above, noncompliance is not reported to DOGGR within 24 hours – it is not reported at all.

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[2] John Cox, "Federal EPA sets deadlines for state action on injection wells," The Bakersfield Californian, August 5, 2014, available at http://www.bakersfieldcalifornian.com/business/kern-gusher/x603939639/Federal-EPA-sets-deadlines-for-state-action-on-injection-wells

[3] Letter from Jonathan Bishop, Chief Deputy Director, Sate Water Resources Control Board, to Jared Blumenfeld, Regional Administrator (Region IX), U.S. EPA, September 15, 2014.

[4] U.S. EPA Supplementary Information: Information Collection Request for Underground Injection Control Program at 9.

[5] Id. at 13.

III. Class II well reporting is inadequate

Because the chemicals injected into Class II wells can be highly toxic, Class II well reporting requirements should be the same as those applicable to Class I wells. In California, oil and gas companies have recently disclosed that benzene, toluene, ethylbenzene and xylenes (BTEX chemicals) are found in high concentrations in the fluid recovered after a well stimulation. These types of dangerous materials typically require disposal into a Class I well. From the perspective of public health and safety, it is logical to apply the same requirements to Class II wells that accept and inject the same chemicals.

While the materials injected into Class I and Class II wells are both harmful, the reporting requirements for Class I wells are much more stringent. EPA does not currently collect from Class II wells: maps and cross sections of USDWs; maps and cross sections of local and regional geology; formation testing program; stimulation program; injection procedures; plans for well failures; emergency and remedial response plans; ambient monitoring program; hydrogeological compatibility/ compatibility of well materials; conduct and report on ambient monitoring; conduct and report on pressure fall-off test.[6]

Only Class I well operators are required to demonstrate, usually by computer modeling, that their wastes will not endanger underground sources of drinking water (USDWs). The operator must provide sufficient information to demonstrate that the hazardous constituents of wastes will not migrate from the disposal site. In particular, the petition must prove that the waste will not reach the roof of the injection zone or a conduit within the injection zone within 10,000 years."[7]

Class I well operators must also submit a waste analysis plan and a description of hydrogeological and geochemical conditions at the site; the physicochemical nature of the waste stream; and proof of conformance with AoR requirements. None of these is required for Class II well operators.

In addition, casing pressure tests are mandated every year for Class I wells, but only every 5 years for Class II wells. Class I requires quarterly reports on monitoring results and annual mechanical integrity testing (MITs). Class II wells are only required to submit monitoring data annually, and MITs must be performed every five years.

The data gathered through Class I well reporting requirements is useful in determining the extent of the risk posed by Class I wells; it should also be commonsense to require the same information from Class II wells. Benzene and other toxic chemicals are being injected into thousands of disposal wells across the country. Thus, the EPA must extend the requirements applicable to Class I wells and make them equally applicable to Class II wells.

IV. All Information collected through this program should publicly available.

In many instances, the public is unable to obtain information regarding injection wells. Many companies attempt to obscure information about their wells by claiming that certain information is a trade secret, or that it is confidential business information (CBI). These claims have no merit in the context of public health and safety.

[6] Id. at 17, Exhibit 4-2.
[7] Id. at 19.

EPA should make clear that trade secret and CBI protections do not apply to information reported under these rules. The federal Trade Secrets Act does not place restrictions as to what information an agency can collect and disseminate. The Trade Secret Act only prohibits disclosure of trade secrets "to [the] extent not authorized by law."[8] EPA has the authority under TSCA to create regulations that permit disclosure of information that would otherwise be considered a trade secret.[9] TSCA is clear that trade secret claims are inapplicable to disclosures that are "necessary to protect public health or the environment against an unreasonable risk of injury to health or the environment."[10]

If EPA were to allow companies to withhold information behind claims of trade secrets, the agency would have no way of evaluating the veracity or accuracy of the claims stated in the affidavit because the agency has no access to the underlying information. With no independent verification of trade secrets, operators have an incentive to make overbroad claims to protect information that should otherwise be made available to the agency and to the public.

Trade secret protection also makes adequate baseline testing considerably more onerous, if not impossible. Parties that wish to test groundwater before injection operations commences will not know what chemicals to test *for*. Doctors treating patients will be less able to properly diagnose a patient without access to a list of chemicals that the patient may have been exposed to. Scientific and public health research is also greatly hindered when information relating to chemical use is kept hidden.[11]

Thus, the EPA should clarify that trade secret claims will not be recognized in connection with any information submitted under the UIC. Similarly, claims of confidential business information should be rejected as a basis for withholding information from the public. Full disclosure is necessary for the EPA and the public to know the true extent of the potential harm that can result from underground injection wells.

Reporting should be complete, mandatory, verified, and submitted under penalty of perjury. Currently, operators face no consequences for submitting incomplete or false information to existing reporting regimes. There are no third parties able to verify whether the information provided by well operators is accurate. Under such a system, neither the EPA nor the public can have any confidence that submitted data reflects the true extent of the risks these chemicals pose.

Finally, any and all reported information should be collected and made available on a user-friendly government website. Reporting should be done on a uniform format to allow for easy comparison and aggregation. The website should have the capability to digitally aggregate information and allow users to download data in a spreadsheet.

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[8] 18 U.S.C. § 1905; see also, 18 U.S.C. 1833 (trade secret protections do not apply to "any otherwise lawful activity conducted by a governmental entity of the United States…")

[9] See, e.g., *United States v Geophysical Corp. of Alaska* (9th Cir. 1984) 732 F.2d 693 (Regulations promulgated pursuant to Outer Continental Shelf Land Act (43 USCS §§ 1331 et seq.) regarding issuance of permits for geophysical and geological exploration of outer continental shelf and providing for disclosure of data and processed information received by Secretary pursuant to such regulations does not violate 18 USCS § 1905; regulations and permit provisions regarding disclosure are "authorized by law."; see also, FLPMA (43 U.S.C. § 1732(b)) ("The Secretary shall, by regulation or otherwise, take *any action necessary* to prevent unnecessary or undue degradation of the lands.")

[10] 15 U.S.C. § 2613(a)(3).

[11] Weinberger, et al., Legislative Interference with the Patient–Physician Relationship, 367 New England Journal of Medicine 16:1557 (October 18, 2012).

V. Conclusion

Given the numerous failures of the California regulators to protect groundwater and the systemic problems with the UIC program, EPA must set a proper example by promulgating strict standards for reporting and monitoring. Robust reporting requirements, combined with full public disclosure, will allow the public to understand the full range and degree of potential risks associated with underground injection wells. Data collection is a crucial first step in protecting drinking water and public health and safety. In particular, we urge EPA to apply the strictest reporting requirements to Class II wells, which recently have been found to be far more dangerous than state agencies have heretofore acknowledged. The EPA has a duty to protect groundwater resources from contamination from these and other types of wells.

Respectfully submitted,

/s/_____

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